Vocational Education Advisory Committee Report

February 2016

Committee Members

- Susan Bak, Chair
- Anne McNeece, Clerk
- Brigid Bieber
- Gary Kushner
- Hugh Fortmiller

Mission Statement

The Committee's mission is to research, evaluate, analyze and recommend the best option or options for Vocational Technical Education that are both academically and financially appropriate for the Town of Boxborough and its students.

Factors considered

- Location
- Community makeup of district
- Academic and vocational tech program offerings
- Innovative education strategies
- Extra-curricular programs
- Physical plant
- Costs
- Pros/Cons of not being a part of a district

Process used

- Identified and selected Vocational Ed schools
- Toured and compared three schools
- Collected and compiled data
- Interviewed current and former MM students and parents
- Met with the five Boxborough students currently enrolled at MM

Selected schools to consider

- Schools in rural communities similar to ours
- Schools in close proximity to Boxborough
- Schools not heavily weighted toward one town
- Considered: Lowell, Worcester, Lawrence and Monty Tech
- Selected: Minuteman, Assabet, Nashoba

Towns in each District

Minuteman	Assabet	Nashoba
Enrollment: 673	Enrollment: 1058	Enrollment: 735
 Acton Arlington Belmont Bolton Boxborough Carlisle Concord Dover Lancaster Lexington Lincoln Needham Stow Sudbury Wayland Weston 	 Marlborough Berlin Hudson Maynard Northborough Southborough Westborough 	 Ayer Chelmsford Groton Littleton Pepperell Shirley Townsend Westford

Enrollment

	Minuteman	Assabet	Nashoba
Capacity	1100-1200	1200	900
Enrollment	673	1058	735
In District	57%	67%	85%
Out of District	43%	33%	15%
Freshman applicants		480	322
Freshman accepted		285	202

Capacity for MM once new building is complete is 628

Distance from Boxborough

School	Distance from Boxborough Town Hall	Average commute time
Minuteman	13.6 miles	34
Assabet	13.5 miles	16
Nashoba	11.1 miles	14

Comparison of Schools

Technical Programs: at all three schools

Automotive mechanics	Culinary Arts & Hospitality
Bio Technology	Design & Visual Communications
Carpentry	Electrical wiring
Computer Programing and Web development	Engineering
Cosmetology	Plumbing & Heating

Technical Programs: differences among schools

Minuteman	Assabet	Nashoba
Robotics		Robotics
Telecommunications & Fiber-optics (Ends 6/2018)		
Environmental Science & Technology		
	Auto Collision	Auto Collision
Metal Fabrication & Welding	Metal Fabrication & Welding	Machine Tool Technology
Advanced Manufacturing (Starts 9/2016)	Advanced Manufacturing	

Technical Programs: differences among schools

Minuteman	Assabet	Nashoba
	Draft Design Technology	
	Painting & Design Technologies	
Multi-media Engineering		Television, Media, Theater Arts
	Business Technology	
Marketing (Ends 9/2018)		Banking, Retail & Marketing

Technical Programs: differences among schools

Minuteman	Assabet	Nashoba
Health Assisting	Health Technology	Health Assisting
Dental Assisting		Dental Assisting
Early Education, Care		Early Education Care
		Veterinary Assistant
Horticulture & Landscaping		

Most Popular Programs

Minuteman	Assabet	Nashoba
Automotive	Health Tech	Carpentry
Engineering/Robotics	Metal Fabrication	Engineering
Biotechnology	Cosmetology	Health Assistant
Environmental	Culinary Arts	Veterinarian Assistant
Plumbing & Heating	Plumbing & HVAC	Plumbing & Heating
Culinary Arts	Electrical & Wiring	Electrical & Wiring
Students are wait listed: Engineering/Robotics, Environmental, Plumbing	Students wait listed all of the above programs	No students were wait listed for these programs.

Innovative Strategies

	Minuteman	Assabet	Nashoba
Dual enrollment	Yes	Yes	Yes
Girls in STEM	Yes	Yes	Yes
Co-ops	Yes	Yes	Yes
AP Offerings	Yes	Yes	Yes
Accreditation for Associates Degree	No	No	Working on it

Extra-curricular: variations exist among schools

- Academic teams
- Vocational clubs
- Music, drama, art clubs
- Gay/Straight Alliance
- Student Council
- Yearbook and Newspaper
- Sports
 - Baseball, basketball, cross-country, football, volleyball, lacrosse, hockey, soccer, cheerleading, swimming, tennis, golf.....

Key Performance Indicators

Key performance indicators	Minuteman	Assabet	Nashoba
Student/teacher ratio: 2014/2015	8.5: 1	10.4:1	12.6:1
Accountability level: 2014 Level 1 is highest of 5	Level 2	Level 2	Level 1
Graduation rate: 2014/2015	90.54%	95.24%	98.08%
Academic Attainment Language Arts: 2014/2015	93.21%	92.86%	95.48%
Academic Attainment Math: 2014/2015	68.52%	76.37%	76.13%
Technical Skill Attainment: 2014/2015	98.26%	97.92%	100%
Graduates attending College or University 2012/2013	50.4%	56.1%	54%

High Needs Population

	Minuteman	Assabet	Nashoba
Economically disadvantaged	19.2%	20.7%	19.2%
Students w/ disabilities	50.8%	33.6%	32.7%
English Language Learners	.3%	1.4%	0%

MCAS - Spring 2015

MCAS % of Students	Minuteman	Assabet	Nashoba
Math Advanced & Proficient Needs Improvement	73%	75%	78%
	21%	20%	1 <i>7</i> %
English Language Arts Advanced & Proficient Needs Improvement	97%	96%	93%
	3%	4%	7%
Science/Tech Engineering	700/	0.50/	200/
Advanced & Proficient Needs Improvement	70%	85%	80%
	29%	14%	18%

SAT 2015

Subject matter	Minuteman	Assabet	Nashoba
Reading	476	466	439
Writing	447	437	413
Math	452	457	452

Post Graduate Opportunities

	Minuteman	Assabet	Nashoba
Accepts in District students ages 18-21	Yes	Yes	Yes
Accepts out of District students 18-21	Yes	Yes	No
Accepts adult students over the age of 21	Yes	Yes	No

Financial: In District

	Minuteman	Assabet	Nashoba
In-District Tuition Current Fiscal Year FY2016	\$27,224	\$11,000 to \$14,000	\$10,000 to \$14,000
Cost per pupil (2013)	\$26,246	\$18,252	\$15,104
Cost of administration per pupil (2013)	\$2,203	\$951	\$774
Cost of administration % of total (2013)	8.39%	5%	5%

Financial: Out-of-District FY2016

	Minuteman	Assabet	Nashoba
Out of District Tuition (SPED & Transportation not included)	\$17,556	\$16,587	\$15,000
Charge for Capital (FY2017)	\$8,121 Per student	\$0	\$0
Cost of transportation out of district -out sourced	\$36,000	\$36,000	\$36,000
Cost to buy-in	N/A	N/A	TBD

Cost of transportation calculated for students going to **one** school. If students go to more than one school cost of transportation increases.

Interviewed Minuteman Parents and Students

What MM parents & students liked best

- Hands-on learning experience
- Balance of traditional academic learning with the skills learned in a vocational program
- Reasonable class sizes
- Got to know teachers well because of small class sizes
- Flexibility of MM administration to offer credit for independent study

MM Parent and Student interviews Drawbacks of going to MM

- Pressure from peers to go to ABRHS
- Misperception that students that go to MM are not college bound
- Not as many AP offerings
- Longer commute versus going to AB
- Does not have band or a theater program

MM Parent and Student Interviews Additional feedback

- Teachers are available to offer extra help
- Very happy w/ high school experience at MM
- Involved in extracurricular activities
- Some students were planning on college, some were undecided
- Some were concerned that students would have struggled at ABRHS because of competitiveness

Options Available to Boxborough

Options to consider

Stay at Minuteman

Withdraw from MM

- Join another District
- Enter into an Inter-municipal Agreement (IMA) with another District
- Go it alone not join another District

Stay at Minuteman

Cons
 Higher cost per pupil
 Capital assessment to non- member Towns is not guaranteed
 Congested commute via Route 2
 Accreditation is in jeopardy given current condition of the building
If building project fails, member Towns now for repovations with
Towns pay for renovations with no state contribution

Minuteman Assessment

Assessment	FY2017 16 Member Current Agreement	FY2020 10 Member Towns Amended Agreement	FY2020 16 Member Towns Current Agreement
Minimum Required Contribution	\$108,137	\$75,535	\$82,665
Transportation	\$8,624	\$11,742	\$9,813
Operating Assessment	\$48,144	\$41,568	\$35,553
Capital Assessment	\$16,614	\$82,422	\$49,183
Total Assessment	\$181,519	\$211,268	\$177,214
Enrollment	5	5	5
Per pupil cost	\$36,304	\$42,254	\$35,443

FY2020 includes capital for new building

Minuteman Assessment Property taxes

Assessment	FY2017 16 Member Current Agreement	FY2020 10 Member Towns Amended Agreement	FY2020 16 Member Towns Current Agreement
Per pupil cost	\$36,304	\$42,254	\$35,443
Per household Per pupil*	\$19.52	\$23.14	\$19.41
Per household @ 5 students	\$97.59	\$115.68	\$97.03
Per thousand Per pupil*	.1778	.1950	.1635

^{*} FY2020 based on \$1.105B Town valuation and average house valuation of \$593,300

Withdraw from Minuteman

Leave Minuteman: Seek to join Nashoba District

Pros	Cons
Member of a District	Uncertainty of membership
 Lower per pupil cost – all inclusive: tuition, transportation, 	• Buy-in cost: amount unknown
SPED and capital	 School in transition: search for new Superintendent
 Less congested commute as compared to MM 	 2004 Rehab of older building
compared to white	2001 Kenas of older sanding
Excellent Technical programs	 Could take several years before the Town becomes a member

Enter into an Inter-municipal Agreement

- Neither Assabet nor Nashoba have an IMA with any sending non-member Towns
- Under an IMA the Town designates a "preferred" vocational school
- The preferred vocational school holds a specific number of slots open for Boxborough students, provided they qualify for admission. Access and costs negotiated
- Pay out-of-district tuition plus the cost of transportation plus SPED and capital (if charged)
- No reimbursement for the cost of transportation by the state

Do not join a District - go it alone

- Could designate a "preferred" school provided the Town gives clear and timely notice to students and their families well in advance
- Students could go to a school other than a "preferred" school if the preferred school does not offer a specific program
- Pay out-of-district tuition plus the cost of transportation plus SPED and capital (if charged)
- No reimbursement for the cost of transportation by the state

Do not join a District: If Assabet were the Preferred School

Pros	Cons
Lower cost per pupil	 Town arranges for and pays for Transportation
 Less congested commute as compared to MM 	 No reimbursement for transportation by the State
 Rehab of building completed October 2015 	 No guaranteed access for qualified Boxborough students
• Excellent Technical programs	<u>quamica</u> boxborough students
 Licensed Practical Nurse Post graduate program 	

Transportation

Out-of-District

Transportation: Out-of-District

- Town responsible for transportation if not a member of a District
- No State reimbursement for transportation
- Options:
 - 1. Purchase and operate van
 - 2. Outsource
 - 3. Piggy back w/ another Town
 - 4. Reimburse parents for mileage (may not be an option for all parents)

Estimated Cost of Transportation

Options	Cost
Purchase and operate a van	\$25,000
Outsource	\$36,000
Piggy back with another Town	<\$36,000
Reimburse parents for mileage	\$2,643 Per student

Cost of transportation calculated for students going to one school. If students go to more than one school, cost of transportation increases.

Options to consider

Stay at Minuteman

Withdraw from MM

- Join another District
- Enter into an Inter-municipal Agreement (IMA) with a District
- Go it alone not join another District

What's in the best interest of the students?

- Town is a member of a District
- Qualified students have a guaranteed place and access to programs
- Retain a voice on the School Committee
- Stability of administration and services
- Favorable student/teacher ratio
- State of the art facilities and programs
- School accreditation
- Reasonable commute time
- Students are well informed about choice of vocational education

What's the estimated financial impact on taxpayers?

	Minuteman In-District New Agreement 10 member Towns FY2020	Assabet Out-of-District Estimate FY2017	Nashoba Out-of-District Estimate FY2017
Per pupil cost	\$42,254	\$28,200	\$26,700
Per household Per pupil*	\$23.14	\$15.16	\$14.36
Per household @ 5 students	\$115.68	\$75.80	\$71.80
Per thousand Per pupil*	.1950	.0276	.0261

^{*} FY2020 based on \$1.105B Town valuation and average house valuation of \$593,300

Conclusions/Recommendations

- We find that all three schools provide excellent technical programs and comparable academic programs.
- We find that each of the three schools provide these educational options at varying costs with MM the highest and Nashoba the lowest.
- We recommend (3-2) that MM is the best educational option for Boxborough students because of guaranteed access for qualified students, outweighing the higher cost at MM.

Thank you!